



CREATING A MAKERSPACE AT BCES

What is MakerSpace? MakerSpace is a general term for a place where people get together to make things. The future BCES MakerSpace will focus on STEM-related activities and projects that inspire creativity, encourage collaboration, explore and discover using a variety of materials.



How do you begin to design a MakerSpace?

There are many things to think about when designing a MakerSpace: storage needs, utilization of the space to accommodate a wide range of activities, and providing alternative work environments. PTO and BCES Administration tapped into the talents of our community. We are very fortunate to have the assistance of BCES parent and Allsteel Designer, Jennifer Callahan. Jennifer recently worked on a similar project for Arizona State University and brings years of experience and knowledge to this project.

“I am delighted for the opportunity to work with BCES on the MakerSpace project. Creating an environment where students can learn in a variety of postures - sitting, standing and lounging, giving students the choice and control over how and where they learn best, making sure they have clear access to technology in the room and to each other when working collaboratively on projects are all integral parts that we will develop within the learning environment of the MakerSpace Room.” - Jennifer Callahan

How will the MakerSpace project be funded? PTO is actively looking for grant opportunities to help fund the MakerSpace project. If your employer offers grants that support education or if you would like to donate, please contact:

Candice@BoulderCreekPTO.com

We are very excited to create an environment that allows learning to unfold through creativity and imagination.

MAD SCIENTIST DAY—3RD GRADE

On October 31st, BCES 3rd grade students participated in “Mad Scientist Day!” It was a jam-packed day filled with experiments and lessons that were both STEM-based and fun for the kids. The teaching team worked tirelessly to plan hands-on experiments that were visually stunning and exciting for both students and parents in attendance. Experiments ranged from a “levitating orb” to a “rainbow in a straw.” Students witnessed science in action!

“My favorite part of the day was listening to and watching the excitement in the students. I heard a lot of, “This is the best day ever!” which is exactly what we hoped would happen.” - Mrs. Bodwell and “Mad Scientist, Albert Einstein”

“I loved seeing our principal and vice principal perform the toothpaste experiment because it was fun to watch it and it was cool to see that science is important to them too!” - Madeline M.



From BCES PTO Board

This month’s newsletter is focused on the current programs and initiatives that PTO is actively working toward implementing at BCES. We are very excited to be a part of encouraging innovation and creativity through Science, Technology, Engineering and Math (STEM). We are inspired by our students, teachers and parents to provide opportunities that are outside of school district funding:

- STEM Curriculum
- STEM Professional Development
- STEM MakerSpace Room
- STEM Resource Database
- Dyslexia Professional Development (training)

We would be unable to make these opportunities available without the support of our BCES families and local sponsors. Thank you for your generosity and ongoing support!

The PTO Board wishes you and your family a joyous Holiday Season!



THE SHOPS AT

N  R T E R R A[®]

CELEBRATE THE SEASON & EARN UP TO \$2500 FOR BCES!

For every dollar spent at The Shops At Norterra, BCES earns points (through Dec. 31st). The more points we earn the bigger the cash grant up to \$2500! Visit Santa every Saturday at Elevate Coffee Co. and get a free photo! For more information on additional points offers and to submit receipts, visit the Norterra website:

ShopAndLog.com/Norterra

You may also drop off receipts at BCES front office and PTO will enter them for you!

BCES S.T.E.M. FAST FACTS

0.4%

Of High School girls choose Computer Science as their college major

17%

Growth for STEM jobs by 2024

20th

U.S. ranking in Science out of 34 countries

27th

U.S. ranking in Math out of 34 countries

36%

Of High School graduates are ready for Math college-level courses

\$37.44

Avg. medial hourly wage for STEM (\$18.68 non-STEM)

44%

Of High School graduates are ready for Science college-level courses

1.4 million

Computer specialist job openings in 2020

8.6 million

Estimated STEM workforce by 2018

STEM TEACHER SPOTLIGHT

Sally Cavolo
6th Grade



Birthplace: Chicago, Illinois. My family moved to Phoenix when I was 3 years old.

Years Teaching at Boulder Creek: This is my 3rd year at BCES currently; I taught here the first year it was opened in 1996.

When did you know you wanted to teach? I knew when I was 7 years old. Both of my parents are teachers so it's in my DNA.

What excites you about STEM at BCES? It represents more than integrating technology into the classroom, it also includes inquiry-based interactive teaching practices. A STEM classroom can get loud and messy! The payoff for the students, however is great which is very exciting to me.

What STEM activities do your students enjoy? My Science classes just finished a weather-based PBL. They chose how to present their topics; some made slide-shows while others created models that were fantastic! I encourage students to consider showcasing their work at the upcoming PVSTEAM event in February 2017.

THE HAYMAKER RESTAURANT CO

A special THANK YOU to the Haymaker Restaurant Co. for providing the Medieval Feast for our 4th grade students on November 18th. The food was delicious and the kids and teachers had a great time eating like kings and queens!



STEM TEACHER SPOTLIGHT

Allison Coppola
Technology Instructor



Birthplace: Phoenix, AZ.

Years Teaching at Boulder Creek: I taught Pre-K for five years and this is my second year in Technology.

What excites you about STEM at BCES? It is fun to learn how to use the new gadgets with my students. MakerSpace is going to be a great environment for students to create and explore. They will have a goal and figure out different ways to achieve that goal.

What STEM activities do your students enjoy? Currently students are using a program sponsored by Phoenix Coyotes which takes them through the process of setting up for a hockey game. We will be starting on the Code.org website which offers activities on the computers and "unplugged" activities away from the computers.

How has STEM changed your way of teaching? I have started small changes by doing unplugged activities and we will be doing more that deals with all STEM skills, not just technology. After attending several STEM-based workshops, I am learning what more I can do in my classroom.

ARIZONA SCIENCE CENTER'S STEM EXTRAVAGANZA

The STEM EXTRAVAGANZA is a fun, engaging, hands-on learning experience. BCES students will enjoy rotating through assemblies, science demonstrations, hands-on activities, and the Universe on Wheels mobile planetarium provided by the Arizona Science Center. During these activities BCES teachers will be attending STEM professional development (training) to assist in applying STEM lessons in the classroom.



This opportunity would not be possible without the financial support of our BCES families. If you are interested in making a tax-deductible donation towards STEM curriculum and activities at BCES, please visit: BoulderCreekPTO.com/donate



NEED ADDITIONAL TAX DEDUCTIONS? CONSIDER BCES PTO!

Boulder Creek PTO is a 501(c)(3) nonprofit charitable organization. Contributions made directly to PTO are eligible for a deductions on your AZ State and Federal Tax Returns.* BoulderCreekPTO.com/donate/



* Consult a qualified tax advisor for advice and to learn more

STEM PROFESSIONALS & VOLUNTEERS WANTED!



Are you a STEM professional and interested in assisting BCES staff with STEM-related curriculum? Boulder Creek PTO is compiling a database of STEM professionals that can assist BCES staff with lesson plans, experiments, and/or classroom activities. Volunteers can donate their time and assistance in various ways and whatever fits your schedule. We are first looking to BCES families and friends to volunteer and grow this STEM initiative.

If you like to help, please email: michelle@BoulderCreekPTO.com for more details!

CALENDAR OF EVENTS

DECEMBER 2016

- 5 "Catch a Snowflake" Begins

- 6 Early Release

- 6 Spirit Night—Barro's Pizza, 5pm-close (Greenway/40th)

- 7 Harkins Theatre Fundraiser Deadline

- 12 Deadline for "Catch a Snowflake"

- 12-15 Holiday Shoppe

- 14 Mingle with Molzhon, 3-4:00pm (Teacher Lounge)

- 16 Treat Day—Jamba Juice

- 16 Spirit Day—Ugly Holiday Sweater/Shirt Day

- 22 Teacher Appreciation—Treat Exchange (all grades)

- 26- Winter Break Recess
Jan 6

JANUARY 2017

- 9 Classes Resume

- 10 PTO General Meeting, 6:30-7:30pm, Library

- 13 Dollar Day

- 13 Spirit Day—Pajama Day

- 16 MLK Day Recess

- 19 Turn Off Technology Night

- 20 Bingo Night—6:00-8:00pm, MPR

- 23-27 K-8 Parent Conference Week

- 25 Teacher Appreciation Potluck (all grades)

- 26-27 Early Release

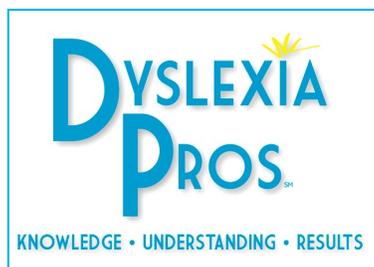
- 31 Early Release

DYSLEXIA PROS—PTO GENERAL MEETING

BCES PTO welcomes guest speaker, Laura Busby, M.Ed., with Dyslexia Pros to the PTO General Meeting on

Tuesday, January 10, 2017 at 6:30pm in the Library.

Please join us to learn about the science and characteristics of Dyslexia in students.



GIRLS ON THE RUN—LEARN, DREAM, LIVE, RUN!

BCES is so excited to have GOTR at BCES! This incredible program is geared towards girls (3rd-5th) and empowers them with building confidence through accomplishments. The 10-week program (coached by Ms. Peck) encourages positive relationships, social skills and provides a framework for setting and achieving life goals. Practice (2 days per week) includes running/walking as a team and the season ends with a 5K run/walk. Medals for everyone! The success of this program has been amazing while shaping girls (over 1 million) into self-assured, strong young ladies. The season will start in February 2017 but registration is now: **December 1st—18th.**



Visit GirlsOnTheRun.org (select Boulder Creek as the participating school). Scholarships available.

Questions? Contact Wendy@BoulderCreekPTO.com. Don't miss out on this incredible program!

Happy Holidays.



BOULDER CREEK ELEMENTARY SCHOOL

22801 N. 22nd Street, Phoenix, AZ 85024

602-449-4500 **Main** 602-449-4503 **Nurse Robin**

602-449-4505 **FAX** 602-449-4501 **Attendance***

*Please call by 8:00am to report absences

GET CONNECTED!

 BoulderCreekPTO.com

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